

Water Conservation

WHY CONSERVE WATER?

Water is a precious resource critical to the economic health of the city, state and continued operations at Sandia National Laboratories/New Mexico (SNL/NM).

Water Conservation Program

A memorandum of understanding (MOU) requires SNL/NM to continually reduce water use to mitigate its impact on the aquifer.

This MOU drives the water conservation program and exists between SNL/NM and the

- Department of Energy
- Kirtland Air Force Base
- City of Albuquerque
- State of New Mexico
- National Research Energy Laboratory

Goal

The goal of the water conservation program is to reduce our water use by 30% based on a 1995 estimated use.

How do we monitor our use?

SNL/NM uses water meters to monitor water use. A central computer communicates with the meters and records data minute-by-minute.

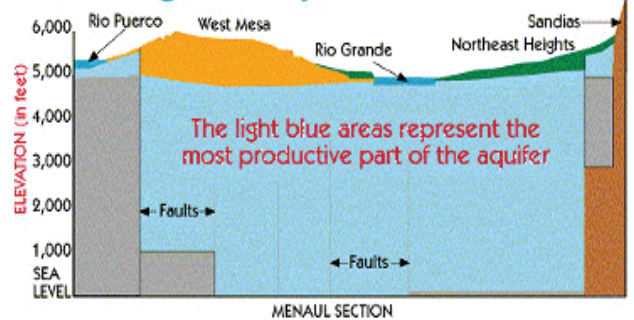
Water meters are installed:

- On all the main lines feeding SNL areas
- On the major buildings in Technical Area IV

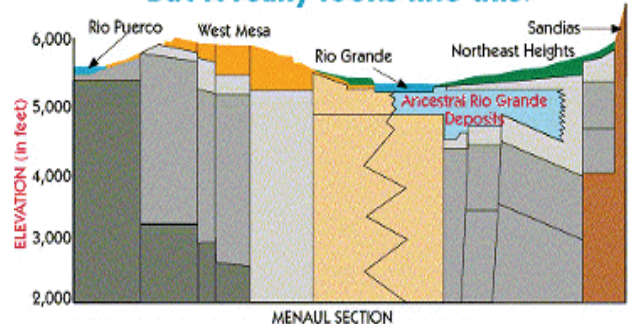


In the future, meters will be installed in Technical Area I and II.

We thought the aquifer looked like this...



But it really looks like this:



Water Conservation Projects

Highlights of some projects are listed below. The estimated water savings are shown in million gallons per year (MGY).

Building 858 & MESA

Increased reverse osmosis efficiency: 35 MGY
Other planned efficiencies in the MESA project will save an additional 60 MGY



MESA

Projects at Other Locations

Steam plant: repaired leaks, replaced deaerator, began caustic addition to boilers: 20 MGY CSRL,
Building 893: replaced once-through cooling system for lasers with closed loop: 10 MGY



Water Conservation

Current Projects Continued...

The installation of the Centralized Irrigation Controls System (CICS) is now complete.

What does CICS do? It:

- Controls watering times and schedules
- Monitors water consumption
- Reports and records alarms, such as high flow when a line or sprinkler head breaks.

It is estimated that CICS will save 8 million gallons per year.



Did You Know...

The average rainfall in Albuquerque is approximately 8 inches per year!

Sandia National Laboratories/New Mexico conserves millions of gallons of water by:

- Repairing leaks

- Reusing rinse water in cooling towers and scrubbers

- Cooling lasers with closed loop systems

- Increasing efficiency in production of ultra pure water

- Installing the Centralized Irrigation Controls System

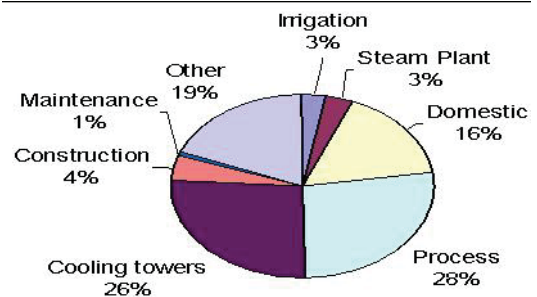
Our Water Use

We use approximately 20 to 50 million gallons of water each month. Generally, use peaks in the summer months. The major consumers are ultra pure water systems, such as dionization



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and reverse osmosis, and cooling systems, such as cooling towers and swamp coolers. Our water use is shown in the pie chart below.



We continue to seek ways to reduce our use!

What can you do?

At work:

- Use only what you need
- Report leaks
- Consider ways to reuse water
- Support the corporate goal to be a good neighbor and look for ways to reduce your use

At home:

- Install low-flow toilets and shower heads
- Do laundry only when you have a full load
- Follow the City of Albuquerque water drop color guide
- Adjust your irrigation schedule monthly
- Take advantage of City of Albuquerque rebates
- Get a FREE Residential Water Audit from the City of Albuquerque

For more tips and information, visit the City of Albuquerque website:

<http://www.cabq.gov/waterconservation/>

For more information, contact:

<http://www.sandia.gov/aqua/default.htm>

Sharon Sanders shasand@sandia.gov

Darell Rogers dmroger@sandia.gov